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Cover: The welfare of sheep in feedlots was one of the ethical issues debated at the Australian Veterinary Association conference. Story p7.
Biosecurity strategy sees accountabilities redefined

By Larry Fergusson
Deputy Director General
Ministry of Agriculture and Forestry

A part of creating the biosecurity system envisaged by the Biosecurity Strategy is to define what biosecurity is and is not. In other words: where are the boundaries between the system and other accountabilities and what are the interlinkages?

MAF has been engaged in the biosecurity business for much of its existence. Originally, MAF was focused on protecting New Zealand’s developing agricultural, pastoral and horticultural industries from the threat of pests and diseases that would damage production or inhibit our ability to sell our products to other countries. From early days there was also a concern for broader issues such as the ban on the importation on snakes and spiders. Eventually the legislation was amended to include broader environmental concerns.

In the early 1990s, a plethora of legislation was replaced by two Acts: the Hazardous Substances and New Organisms Act and the Biosecurity Act.

The latter Act enabled other departments, regional government and sector groups to take action to protect their areas of interest from biosecurity threats. Hence we have seen the development of essentially private pest management strategies (e.g. the Bovine Tb Pest Management Strategy under the auspices of the Animal Health Board), regional pest management strategies and the involvement of other government agencies in biosecurity.

There are currently four central government agencies with a biosecurity interest: MAF, the Ministry of Fisheries concerned with marine biosecurity, DoC with protecting our indigenous biodiversity and ecosystems outside the conservation estate. The Department of Conservation has long been involved in the management of pests and diseases to protect the conservation estate. In order to do that, it has also had an interest in what others, regional councils in particular, do to manage pests that might threaten the conservation estate. DoC also administers other legislation that provides for the management of pests (e.g. the Wild Animal Control Act). There are other initiatives which DoC takes to manage pests on a national basis to protect indigenous biodiversity and ecosystems outside the conservation estate.

The Ministry of Health is concerned about the potential for new organisms to act as sources of, or vectors for, diseases affecting humans. For example, health authorities have a long history of involvement in port sanitation and the potential for vermin to transmit new diseases to New Zealanders. More recently, there has been a concern about the impact of new organisms on human wellbeing (for example, aggressive biting insects).

While MAF will take accountability for the contribution that the biosecurity systems can make to all the objectives above, it does not take accountability for the objectives themselves.

Among the suggestions that came out of the Biosecurity Strategy process was the establishment of a chief executives’ forum, comprising the four government agencies referred to earlier. This body will clarify the interlinkages and interactions between the objectives of all the agencies and set the objectives for the biosecurity system. It will be the forum in which the chief executives agree how they will work together to achieve their combined objectives.

Another significant element in the picture of joint contributions is the role of regional councils. A regional/central government chief executives’ forum has also been established. There is already very significant collaboration between these two elements of government and this body will serve to enhance and build on that foundation.

www.maf.govt.nz/biosecurity-strategy/strategy-index.htm
An integrated risk management framework

Among the projects of the Biosecurity Strategy Implementation Team (Biosecurity 49:1, 1 February 2004) is developing a basic “integrated risk management framework” – a mechanism to guide resource allocation in managing risks across the biosecurity system.

Weaknesses highlighted

Decision-making in biosecurity is characterised by complexity and uncertainty. The main failings have been inconsistencies and deficiencies in the methods and processes used by biosecurity agencies to assess and prioritise their use of resources.

Reviews of New Zealand’s biosecurity programme have highlighted the absence of a framework for prioritising resource allocation across the biosecurity continuum (pre-border to pest management) and sectors (conservation, agriculture and forestry, marine and human health).

These weaknesses have undermined confidence that decisions on resource allocation are robust and consistent, accurately reflect relative priorities and achieve best use of available resources with an appropriate balance across the biosecurity system.

To improve resource allocation, the Biosecurity Strategy for New Zealand called for “an integrated framework for establishing whole-of-system priorities and providing greater transparency and accountability in risk management”.

Prioritisation framework

This call was answered by the interagency Biosecurity Working Group, which developed the Government response to the Biosecurity Strategy in the first half of 2003, in designing a framework for prioritising central government biosecurity activities.

Limited resources is the fundamental constraint. While this may be eased by seeking additional funding, we also have to prioritise to make most effective and efficient use of available resources. To be sure we are allocating resources to our highest priorities, we need to be able to assess and compare alternative uses of resources. This requires common criteria and methods in assessing priority.

With the release of the Biosecurity Strategy, the Minister for Biosecurity agreed the following prioritisation criteria:

- technical – feasibility, suitability and probability of success
- practicality – logistics, resourcing, timing, opportunities, risks, past achievements and stability
- benefit-cost – encompassing the full range of effects across all sectors
- strategic – contribution to goals and key priorities, long-term benefits, synergy and coverage
- acceptability – stakeholder concern, needs of Maori, international interests, distributional considerations and risk preferences.

In these criteria, the assessment of benefit-cost should encompass the full range of effects across all sectors:

- commercial, including primary production, industry and service sectors
- environmental, including indigenous and valued introduced species, biological systems and biodiversity
- social, including personal property and lifestyle
- human health and well-being
- Maori cultural and spiritual values
- public, in terms of Crown resources.

The prioritisation framework also included basic tools for applying these criteria.

IRFM project

The Biosecurity Strategy Implementation Team project to develop an integrated risk management framework (IRMF) for biosecurity builds on this earlier work to guide resource allocation in managing risks.

An “integrated” approach involves identifying risks and assessing and prioritising the allocation of resources to their management from a whole-of-system perspective. It raises prioritisation from within groups and sectors to across the biosecurity system.

Current work on developing this IRMF combines:

- further developing and testing the prioritisation framework
- improvements to assessment of biosecurity risks and options for their management
- developing a tool to identify risks across the biosecurity system.

The first task, however, is to define the overall framework within which to set these three decision-support components: identification, assessment and prioritisation.

This project has also provided input into the Strategic Unit’s organisational design projects, looking at the structure needed to support an integrated approach to assessing and prioritising resource allocation in biosecurity risk management. Greater consistency in decision-making and processes such as import health standard development and incursion response is also being progressed.

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Biosecurity Issue 52 • 15 June 2004

MAF plant health specialist seconded to lead international body

MAF plant health specialist, Dr John Hedley has been made a Principal Adviser in recognition of his unique contribution to international phytosanitary issues. He has been seconded to Rome for three months as Coordinator of the International Plant Protection Convention (IPPC).

The position recently became vacant, but the FAO has had trouble finding a replacement. John has been employed in this position in the past and consequently he was called upon to return until a suitable person is recruited to fill the position fulltime.

John has worked for MAF since 1968 and has contributed to the International Phytosanitary sector for over two decades. Since he last worked as Coordinator of the IPPC Secretariat, John has worked in the Plants Group of the former MAF Regulatory Authority and more recently in MAF Biosecurity’s International Team when it was formed in 1999. He has been closely involved in the activities of the Asia and Pacific Plant Protection Commission, as Chair of the Standing Committee on Plant Quarantine for most of the period since 1987, and with the Pacific Plant Protection Commission since its inception.

Among his achievements, John has been credited by the World Trade Organisation Sanitary Phytosanitary (SPS) Secretariat with stepping in when the idea of an international phytosanitary standard-setting body was not much more than an expectation created by the SPS Agreement, to turn it into a fully functional reality.

Robert Griffin, former coordinator of the IPPC Secretariat, and John’s successor in that position, believes that it is “through the vision, persistence, hard work and sacrifice of John that the IPPC has come anywhere near fulfilling the role envisioned for it by countries in the SPS Agreement”. John is expected to return to New Zealand in late July.

Budget boost for biosecurity defences

Last month’s Budget has allocated $46.5 million in new funding over four years to strengthen New Zealand’s defences against exotic weeds, pests, and diseases, says Biosecurity Minister Jim Sutton.

He says baseline funding is the best measure of government commitment to biosecurity, as total funding in any year includes money for one-off incursion responses.

“Baseline funding for 2004-05 – operating only – increases from $154 million this financial year to almost $165 million next financial year. This represents a 7.4 percent increase over the previous year and a 57.5 percent increase since the Labour-led government took office,” Mr Sutton said. The $46.5 million budget allocation includes:

- $19.5 million over four years to improve marine biosecurity: $4 million next financial year rising to around $5.2 million in subsequent years.
- $19.5 million over four years to improve marine biosecurity: $4 million next financial year rising to around $5.2 million in subsequent years.
- Another $1 million a year to the Protect New Zealand programme.
- Another $7.8 million over four years for monitoring to ensure decisions on border management remain consistent and cost effective.
- $404,000 this financial year and $405,000 in out years to fund a foot and mouth disease vaccine bank.
- $400,000 to ensure conservation biosecurity is maintained.

Associate Biosecurity Minister Marian Hobbs says the national saltmarsh mosquito surveillance programme will receive additional operating funding of $1.6 million in this financial year followed by at least another $6.3 million over the next four years.

“We have done well on battling the southern saltmarsh mosquito. This funding increase will assist us to detect new incursions of exotic species as soon as possible, making the chances of eradication more likely.”

She says the extra funding for marine biosecurity will provide

- increased surveillance in ports and marinas for high-impact exotic species
- increased resources to assess threats to the marine environment
- increased research to assist in managing the main sources of risk to the marine environment (ballast water and fouling on vessel hulls).

Mr Sutton says the government’s commitment to biosecurity is indisputable.

“In 2001, we introduced a $200 instant fine for biosecurity breaches found at airports; something previous governments had been too scared to do.

We put in the extra money for soft-tissue x-ray machines and detector dog teams to make sure screening of air passengers and crews was 100 percent. We ensured that all sea containers were screened.

“All this has been done while still enabling trade and tourism to flow at ever-increasing rates.”

MAF Director-General Murray Sherwin (left) making a presentation to John Hedley (right) in recognition of his international contribution.

www.ippc.int
Funding review looks at cost recovery

This year MAF will examine its funding and cost recovery arrangements for biosecurity services – one of the expectations from the Biosecurity Strategy.

The Biosecurity Funding Review is being run jointly by the Biosecurity Strategy Implementation Team and the MAF Policy unit, and involves reviewing existing funding arrangements for all biosecurity services delivered by the four core biosecurity agencies: MAF, the Ministries of Fisheries and Health, and the Department of Conservation.

The project involves assessing existing funding arrangements against a set of funding principles that were approved by Cabinet as part of the government’s response to the Strategy in July 2003.

The objective is to establish funding arrangements that:

- assist in efficiently minimising biosecurity risks
- minimise the costs of compliance and administration
- help to keep to costs of the supply of service low
- are fair
- are consistent with New Zealand’s international obligations; and
- cover the full costs of the services provided (i.e. that avoid cross-subsidy between services).

As part of the response to the Strategy, Cabinet considered the funding arrangements for some types of biosecurity services and has instructed biosecurity agencies that:

- Funding arrangements must be consistent with New Zealand’s international obligations
- The full costs of inspecting, treating, responding to interceptions and clearing goods at the border should in most cases be recovered through a clearance charge on importers
- The practicality and desirability of recouping the costs associated with clearing passengers at the border should be investigated further (this is not part of the Biosecurity Funding Review – see more below)
- There should be an increase in the use of levies under the Biosecurity Act for funding surveillance, incursion response and pest management services, but that a considerable portion of tax funding remain; and
- The full cost of an accreditation services should be met through user charges placed on the individuals or agencies seeking accreditation.

The review is likely to lead to some increase in the use of both user charges and levies to fund biosecurity services, and also an increased focus on how best to involve those paying in decision-making about biosecurity services. It is expected that there will continue to be an ongoing need for considerable levels of tax payer funding.

The Working Group that developed the Government’s response to the Biosecurity Strategy estimated government biosecurity spending in 2003/04 at $304 million (see graph for breakdown).

Consultation should begin in the next few months. Changes in funding flowing resulting from the review are not expected to be in place before the 2005/06 financial year.

The team will ensure that any changes to cost recovery arrangements needed before the review are complete and consistent with the review’s work.

MAF is also involved in the Passenger Cost Recovery project, which is currently being consulted on with industry. This consultation focuses solely on passenger clearance services.

For further information about the Biosecurity Strategy: Funding and Cost Recovery:

- www.maf.govt.nz/biosecurity-strategy/funding.htm
- Hayden Glass, Project Leader, Biosecurity Funding Review, phone 04 471 5527, hayden.glass@maf.govt.nz
- Chris Baddeley, Team Leader, Biosecurity Policy, phone 04 474 4266, chris.baddeley@maf.govt.nz

International speakers for Biosecurity Institute seminar

Mr Tetsuro Uesugi, Biodiversity Coordinator and Acting Director of Policy and Invasive Species at Japan’s Ministry for the Environment, will be one of the guest speakers at the New Zealand Biosecurity Institute’s national education and training seminar (NETS) being held in Rotorua from 21-23 July, 2004.

Mr Uesugi will be outlining new measures being introduced in Japan at a national level to address the problem of invasive species. Other international speakers include Australia’s Dr Mark Lonsdale (Chairman of the Global Invasive Species Programme), Auckland University’s Dr Mick Clout, founding chair of the IUCN (World Conservation Union) Invasive Species Specialist Group, and Sarah Russell (Australian Quarantine Inspection Services).

The programme for NETS2004 covers all aspects of biosecurity, with speakers from government departments, regional councils, research institutes, private biosecurity providers, universities and community groups. The three day seminar provides an opportunity for all those working in the field of biosecurity to network and share experiences and ideas.

For registration forms and programme: www.biosecurity.org.nz
Challenging ethical issues at Australian veterinary conference

The New Zealand Veterinary Association’s animal welfare coordinator, Dr Virginia Williams, attended last month’s Australian Veterinary Association (AVA) Conference in Canberra. Here, she reports on items of interest to New Zealand from an animal welfare perspective, including live sheep exports and the link between animal and human abuse.

Cormo Express incident

Australian Veterinarians for Animal Welfare and Ethics (AVAWE) is a special interest branch (SIB) of the AVA. This year, AVAWE held a combined session with the Sheep SIB, focusing on the export of live sheep for slaughter. This issue has been the subject of fierce debate in Australia since last year’s Cormo Express incident, in which a shipment of sheep was rejected by Saudi Arabia.

‘Animals Australia’, represented by Glenys Oogies, argued that the trade represents an abandonment of Australia’s ethical and legal standards for economic gain, and that banning the trade altogether would set “an ethical precedent that would echo internationally”. Ethicist Neil Levy agreed, finding the trade ethically unjustifiable unless welfare standards in destination countries are significantly raised.

Tony Brightling and Nigel Brown, veterinarians with experience on transport ships and on the ground in the Middle East, indicated that, with advances in the design of both ships and feedlots in destination countries, welfare of transported sheep has shown significant improvement. However, concerns were acknowledged about animal welfare at some feedlots and at abattoirs, where slaughter methods do not conform to Australian standards.

In relation to the Cormo Express incident, Federal Chief Veterinary Officer Gardner Murray indicated that possibilities being considered for minimising future risks include requiring a preloading inspection by the destination country and ensuring that even rejected animals can be off-loaded, to avoid difficulties of finding and loading food for them at sea.

Human and animal abuse links

Another AVAWE session of interest focused on the role of veterinarians in highlighting the links between human abuse and animal abuse. Psychologist Eleanora Gullone presented results of a Monash University survey of women in refuges, which demonstrated significant links between family violence and animal abuse.

The survey showed women were remaining in violent relationships for significantly longer periods in order to protect pets threatened by violent partners.

Alongside this research, veterinarian Peter Green surveyed Australian practitioners on cases of deliberate abuse seen in practice, finding an incidence of 1 in 800 cases.

Notwithstanding the survey result, the failure of veterinarians to recognise deliberate abuse was identified as an issue of concern.

Animal hoarding

Mark Lawrie, Chief Veterinarian for the New South Wales SPCA, spoke on the phenomenon of animal hoarding, noting that this is not simply an animal welfare problem but one where psychiatric help is needed for the owners. He emphasised the need for veterinarians to recognise the signs indicative of such clients, as did veterinary behaviourist Kirsty Seksel, who explained the behavioural manifestations of animal cruelty and abuse.

Criminal profile

John Clark, of the New South Wales Police, emphasised the value of information on animal abuse to the police. His research has shown that certain types of animal cruelty can indicate other, specific criminal behaviour. Any information available to police on suspected or actual animal abuse can be helpful in adding to the profile of potential suspects.

Reporting abuse

The reporting of animal abuse by veterinarians was given an international perspective by Canadian veterinarian Alice Crook, who indicated that this issue had been given priority by the Canadian Veterinary Medical Association. While reporting is encouraged in Canada, it is mandatory in some states in the United States.

In New Zealand, reporting is an ethical requirement if a veterinarian is not able to solve an issue through consultation and education. Simon Bain, President of AVAWE, said the AVA does not favour mandatory reporting but there is an awareness of the need for veterinarians to be able to report such issues without the fear of litigation; at the moment there is a conflict of interest with their constitution regarding confidentiality.

First Strike

If veterinarians are to report effectively, however, a network of those involved in the animal abuse–human abuse interface is needed. Virginia Williams spoke about the ‘First Strike’ campaign, profiled in issues 41 and 50 of Biosecurity, to facilitate cooperation between law enforcement and welfare agencies with the aim of decreasing violence in society. Originating in the United States, First Strike was introduced to New Zealand about 18 months ago through UNITEC, Institute of Technology in Auckland, with the involvement of other government and community organisations.
From Massey to bagpipes, BSE and bullets in the Balkans

By Ian Dacre,
Royal (Dick) School of Veterinary Studies, University of Edinburgh

After four years as a veterinary assistant during the height of the bovine spongiform encephalopathy (BSE) scare in Scotland, I could not have found a country of much greater contrast for my next post than Morocco. As the newly appointed Technical Director for the Society for the Protection of Animals Abroad (SPANA), I began a six month probationary period that would continue for over four years and started a life-long relationship with working equines.

I had graduated from Massey University with a desire to travel and see the world in my ‘OE’ years. This was fuelled by a documentary that I watched during my studies, on the work carried out by the Brooke Hospital for Animals, a British equine charity in Egypt. Here were images of Zebelline donkeys carrying out their arduous daily tasks in the brickworks of Cairo, and the work being done by veterinarians from the Brooke for the donkeys’ (and their owners’) welfare.

Animal traction demand growing

A 1982 FAO report suggested that the demand for animal traction was likely to double in the next 15-20 years. The vast majority of farmers in developing countries work small plots of land. With both increasing populations and marginalisation of impoverished farmers in these countries to more remote mountainous areas, animal traction is likely to be the only viable option for such agriculturalists.

In 1998 there were 300 million draft animals in the world estimated to be saving 20 million tonnes of petroleum per annum, ploughing 50 percent of cultivated land and hauling 25 million drawn vehicles. Their economic importance is not likely to diminish in our lifetime.

Neither are the resources of equine charities such as SPANA likely to increase sufficiently (if at all, in the present economic climate) to maintain their current field operation strengths. Many charities have been affected by the general downturn in the stock market as well as a gradual dwindling of their grass-roots support base.

Change of emphasis for animal charities

Many of these charities have rightly turned from traditional ‘first-aid’ refuges to longer-term integrated education programmes, where benefits are not so easily demonstrated to patrons on a yearly basis. These may vary from farriery training courses to school-visit programmes, post-graduate veterinary development by sponsoring internships, or small research projects. For me, key achievements were improving access to educational materials for in-country staff and helping to increase the number of veterinary students and new graduates who came to work as volunteers in the centres. Hospitalising over 2000 equines and treating over 60,000 equine outpatients each year, there was never a shortage of interesting case material.

Refuges great practical experience for vets

Animal refuges in developing countries benefit more than the local populations surrounding them. Visiting veterinarians could expect to gain experience, not only in treating a myriad of typical working equine conditions (cachexia, harness wounds, advanced lameness pathology, advanced respiratory pathology), but also to experience first hand numerous exotic diseases previously only read about: piroplasmosis, rabies (canine and equine) and West Nile Fever, to name a few personally encountered. Equally, conditions such as influenza and tetanus in equids, or distemper in canines were commonplace compared to developed countries.

These experiences benefit the education of not only visiting volunteers, but also Moroccan veterinary students who all spend two weeks (minimum) working in the centres as part of their course’s practical requirement. Encountering exotic disease first hand is the best education a veterinarian can experience to aid in disease detection upon its arrival in a new country. The numbers of veterinarians sent from abroad to Britain to gain such experience during the 2001 foot and mouth disease outbreak is just one example.

Although based in Morocco during these four years, I also worked in Jordan, Tunisia and Mali. However, my visit to Kosovo in July 1999, one week after the United Nations troop deployment, gave me some of my most memorable experiences. My previous caseload for gunshot wounds had amounted to one Doberman in Essex with an air pellet wound to his abdomen. Suddenly I was faced with multiple rifle wounds, 5-10 days old, in free-roaming cattle. Those survivors were lucky still to have had access to feed and water, unlike many others that had been locked indoors and perished.

Since my return to the United Kingdom, I have become a member of SPANA’s veterinary council, as well as participating in courses and conferences.
Animal welfare law conference promotes effectiveness of NZ legislation

More than 90 people attended New Zealand’s first conference on animal welfare law, held in Auckland on 13 March 2004. Organisers were delighted with the interest shown and the feedback they received.

The aim of the conference was to increase effectiveness in investigations and enforcement action under the Animal Welfare Act 1999. The Act is New Zealand’s principal animal welfare legislation. It sets considerably higher and more detailed animal welfare standards than its predecessor, the Animals Protection Act 1960. It also contains a sophisticated range of tools to assist in the protection of animals, including forfeiture orders and search and seizure orders. The Act is administered by MAF, and is enforced by MAF, the Royal New Zealand Society for the Prevention of Cruelty to Animals (SPCA) and the Police.

MAF helped fund attendance at the conference by SPCA inspectors, and viewed this as a valuable opportunity to provide ongoing training for the inspectors, who do a tremendous amount of valuable work in enforcing the Act.

The conference opened with an introduction to the Act and its background by Mark Neeson, Principal Adviser with MAF Policy’s Biosecurity and Science Policy Group, who led the team that drafted the legislation. This was followed by a presentation by Judge David Harvey, on factors relevant to sentencing for animal welfare offences, and a series of elective workshops on a range of topics including:

- preparing a prosecution file
- use of expert evidence (presented by Jacqui Pate, Senior Investigating Solicitor, MAF Special Investigation Group)
- making a sentencing submission
- forfeiture orders
- search and seizure under the Act.

The list of speakers was impressive, and included Crown prosecutors and law lecturers. A stimulating and positive panel discussion, involving Neil Wells (Programme Leader, Animal Welfare, UNITEC School of Natural Sciences), Jim Boyd (SPCA Inspector, Bay of Islands SPCA) and Earl Culham (Senior Animal Welfare Adviser, MAF Special Investigation Group), took place in the afternoon.

Proceedings from the conference will be available on the website of the Animal Rights Legal Advocacy Network (ARLAN), which co-hosted the seminar with the UNITEC School of Natural Sciences.

ARLAN is a national organisation of lawyers and law students committed to animal welfare. Among their other activities, they provide legal advice to the SPCA and produce a regular newsletter, published on their website (below).

UNITEC offers a range of animal health and welfare-related courses and qualifications, and is also the base for the New Zealand First Strike campaign (Biosecurity 50:18).

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www.arlan.org.nz

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Biosecurity People

Animal Biosecurity

Tim Das has joined the Animal Import and Export section on secondment for six months to replace Sally Aitken while she goes on maternity leave. Tim has been with MAF Quarantine Service for 26 years and is married with three children and one mokopuna.

He will be responsible for responding to enquiries regarding the import and export of live animals, as well as the importation of animal products. He will also be the Systems Administrator for the database IMPACT in Sally’s absence.

“I look forward to working with a team who shares the same vision of maintaining New Zealand’s clean green image,” Tim says. “I welcome the opportunity to see what goes on in the technical side of developing an IHS and having an opportunity to contribute.”

in Albania, Morocco and Syria. More details on SPANA’s work may be found on its website.

www.spana.org

Ian Dacre BVSc MRCVS, Department of Veterinary Clinical Studies, Royal (Dick) School of Veterinary Studies, University of Edinburgh, United Kingdom


(2) Proceedings from The Third International Colloquium for Working Equines (RS Ramaswamy, Mexico City, Mexico, 1998).
Bird flu at Cambodian wildlife rescue centre

Dr Dorothy Geale, Programme Coordinator, Exotic Disease Response, Animal Biosecurity recently visited Cambodia on the invitation of the Food and Agriculture Organisation of the United Nations (FAO). In Biosecurity 51:8 we reported on Dr Geale’s observations of the impact of highly pathogenic avian influenza (HPAI) or “bird flu” in that country. In the second of this series of two articles, Dorothy describes the effects of the virus at Cambodia’s Phnom Tamao Wildlife Rescue Centre (PTWRC), where 86 of 347 captive birds perished.

HPAI appeared in South East Asia in January 2004 with a declaration to the Office International des Epizooties (OIE) of widespread infection by Vietnam on 8 January. Within two weeks, most of South East Asia confirmed H5N1, followed by Indonesia and mainland China in February. Cambodia appears to have been spared the devastation experienced by Vietnam and Thailand. The poultry populations of Vietnam (207,000,000, or 2590 birds/km²) and Thailand (213,500,000 – 1136 birds/km²) far exceed poultry in Cambodia (19,851,000 – 374 birds/km²). Both Thailand and Vietnam slaughtered more birds than the total Cambodian poultry bird population.

But the impact of avian influenza H5N1 extends beyond poultry. A peregrine falcon was confirmed with the disease in Hong Kong, as were crows in Japan. The third official confirmation of H5N1 in Cambodia was made in the Phnom Tamao Wildlife Rescue Centre (PTWRC), about 45 km south of Phnom Penh. Of a collection of 347 exotic birds, 86 died. Formerly a zoo, the site has been taken over by WildAide, an international organisation focused on wildlife preservation and rehabilitation. PTWRC is a popular local attraction, with up to 300,000 visitors a year.

Unknown at the time to Cambodian Department of Animal Health and Production, the PTWRC detected mortality in crested serpent eagles on 15 December 2003 – more than a month before the official index case in Phnom Penh on 23 January 2004. Precise records were maintained by PTWRC staff, which allows insights into the outbreak in Cambodia and transmission within the centre itself. In the first three days, the disease erupted in raptors including grey headed fish eagle, crested serpent eagle, white rumped vulture, spotted wood owls, brown fish owl, spot bellied eagle owl and buffy fish owls.

Raptors are fed chicken obtained from the Kandal market in central Phnom Penh. Keepers purchase provisions for zoo animals each day, seeking out bargains from local markets. There are no abattoirs for poultry in Cambodia. Recently dead and ill birds are sold as slaughtered meat in markets, perhaps accounting for the public preference for “fresh” live birds.

Thirty-four raptors died between 15 December 2003 and 1 January 2004. Herons, egrets and cranes were subsequently affected, suggesting respiratory transmission or mediation through free-living or wild birds such as

New Zealand helps combat international animal disease outbreaks

New Zealand’s commitment to international animal health assistance in cases such as the bird flu outbreak in South East Asia has been strengthened, with the signing on 24 May of an updated international agreement with Ireland, Canada, United States, Australia and the UK.

The agreement enables these countries to combine their efforts by supplying experts including veterinarians, laboratory diagnosticians, animal health technicians and emergency managers to combat animal disease outbreaks together. It will also be an opportunity for these experts to discuss and exchange information to better understand and combat developing diseases.

International emergency assistance such as that given by New Zealand to the UK when about 30 personnel were supplied during the 2001 foot and mouth outbreak has been given on an informal basis. The new agreement officially ensures the signatories that they can rely on each other for expert support in the case of an animal disease outbreak.

The agreement was signed by Chief Veterinary Officers from the six countries at the May conference of the Office International des Epizooties, the world organisation for animal health, in Paris.

While the primary objective of sending New Zealand animal health personnel to work in overseas outbreak responses is to provide assistance, it also provides invaluable experience to help strengthen this country’s preparedness.

Continued on page 11
Bird flu: continued from page 10

large billed crows that frequent the aviary areas. Thirty-two aquatic feeders died between December 17 and January 13. Most of these birds were released or free living individuals that frequented a pond 200 metres from the raptor aviary.

The remaining 20 birds to die comprised of a hornbill, crows, parakeets, peafowl, jungle and guinea fowl. A third of these were free-flying crows and it is thought that more of these may have died but not been counted. Most of the latter are omnivores or scavenging birds. Only two frugivores (hornbill and parakeet) died in the first week of the episode which may or may not be related to the epidemic.

In an effort to diagnose the disease, centre officials submitted birds for post mortem to a private veterinary practice for infectious disease investigation and toxicology analysis in Bangkok. Birds were finally sent directly to the Pasteur Institute du Cambodge for avian influenza diagnosis in January when the presence of bird flu became known in South East Asia.

At this laboratory, H5N1 was confirmed by polymerase chain reaction (PCR) in the Alexandrine parakeet, spot bellied eagle owl, crested serpent eagle, changeable hawk eagle, large billed crow and grey heron.

It is interesting to note that wild cats also showed signs of disease (primarily lethargy and inappetance) during the December-January period of bird deaths.

Diagnostic results from samples taken were not available at the time of writing, but it is known in Thailand that two domestic cats were found to have antibodies in their blood, indicating exposure to the disease, and a tiger died of H5N1.

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New internal parasite found in ostriches

Wire worm (Libyostrongylus douglassii) has been found in New Zealand for the first time.

The discovery of the internal parasites was made on an ostrich farm in the North Island.

L. douglassii is a parasite of the upper gastro-intestinal tract in young ostriches. It lives in the surface epithelium and sucks blood causing a severe inflammatory reaction and anaemia. Symptoms include stoppage of digestion and anaemia, and mortality can be significant. The parasite is endemic in sub-Saharan Africa and South America but has also been reported in farmed ratites in South Africa, Australia, the United Kingdom, and North America. Wild birds do not spread the parasite.

Wire worm eggs are passed in the faeces of infected birds and can remain infective on pasture for as long as three years. Effective treatment with deworming products available in New Zealand can be applied every 28 days to break the life cycle. This is the approach adopted overseas for managing the organism.

Live ostriches were imported into New Zealand between 1992–96 – none have been imported since then. The conditions in the import health standards at the time included a treatment for gastro-intestinal parasites. This suggests that L. douglassii has been present in New Zealand for at least 8 years and it is probably widespread.

Implications for New Zealand

Libyostrongylus parasites appear to be host-specific for ratites. The only endemic ratite in New Zealand is the kiwi.

Taxonomically, kiwis are probably closer to rheas than ostriches. The risk to kiwis is unlikely but not certain. The possibility of interaction with kiwis in the wild is remote, but in places such as zoos and aviaries, ostrich-derived eggs or larvae could come into contact with kiwis by contaminated footwear or other mechanical means. There are no human health risks.

Records indicate that there are 291 ostrich farms and a total of 13,770 ostriches in New Zealand. There are three slaughter houses operating which process ostriches: Feilding and a new operation in Waimana in the North Island, and Clover in the South Island. The ostrich industry is represented by the New Zealand Ostrich Association which has about 50 members. The Ostrich and Emu Standards Council

Continued on page 12
Ants recognised as Pacific’s most serious pest threat

An overview of the Pacific Ant Prevention Plan proposal was presented at the joint Regional Biosecurity, Plant Protection and Regional Animal Health meeting in Suva, Fiji in March 2004. The aim was to gain endorsement for the plan from the Pacific Island Countries and Territories (PICTs).

The meeting was attended by representatives from 21 PICTs and was a great opportunity to increase awareness of the serious threats posed by invasive ants and the financial implications of not preventing their spread through the region.

The proposal (see Biosecurity 49:9) was developed by the Pacific Invasive Ant Group (PIAG) which includes representatives from the Department of Conservation, MAF, National Plant Pest Reference Laboratory (NPPRL), Invasive Species Specialist Group, Landcare Research Ltd, Victoria University, United States Department of Agriculture, South Pacific Regional Environment Programme, the Nature Conservancy, Fire Ant Control Centre, Secretariat of the Pacific Community and AgriQuality Ltd.

The proposal was well received and discussed further during a working group session.

Based on the outcomes of this session, the following recommendations were unanimously endorsed by the delegates at the conclusion of the meeting on 19 March, that the meeting:

- recognises red imported fire ant (RIFA) and other invasive ants as some of the most serious pest threats in the region. Unlike other quarantine pests RIFA can cause direct impact on human, animal and plant life and can devastate island ecosystems and livelihoods.
- supports the efforts of the Pacific Invasive Ant Group and recommends that Secretariat of the Pacific Community (SPC), South Pacific Regional Environment Programme and PICTs work together to prevent the entry of this pest into the PICTs.
- recommends an increased awareness campaign, training on identification of RIFA and other invasive species to enable surveillance and monitoring in the PICTs.
- recommends that SPC-Plant Protection Service focus on RIFA and other invasive ants and to draft preparedness plans.

Now it is up to the South Pacific Regional Environment Programme, the Secretariat of the Pacific Community, the Pacific Invasive Ant Group and the Invasive Species Specialist Group to collaboratively source funding and to implement the Pacific Ant Prevention Plan in a way that is compatible with PICT needs and capability.

Expect further updates as more progress is made.

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www.issg.org/PAPP.htm

Attendees at the joint Regional Biosecurity, Plant Protection and Regional Animal Health meeting in Suva, Fiji.

Ostriches: continued from page 11

operates as an advisory group for MAF. The industry is relatively small; last year about 8000 birds were slaughtered and 75 percent of the meat was exported.

Actions by MAF

MAF has commissioned a comprehensive literature review to assist decision making, and from which information for farmers and veterinarians can be developed to assist with the management of *L. douglassii* in New Zealand. In collaboration with the Department of Conservation, MAF’s Indigenous Flora and Fauna unit is conducting an initial assessment of the potential exposure of kiwi to ostriches. MAF immediately advised the New Zealand Ostrich Association of the presence of the parasite and has developed a communication plan targeting ostrich farmers, ostrich veterinarians, laboratory parasitologists and ostrich slaughterhouse veterinarians to ensure enhanced reporting of suspected infection.
Biosecurity Issue 52 • 15 June 2004

Biosecurity flavour to Entomological Society gathering

The 53rd annual Entomological Society of New Zealand conference held in April was preceded by a two day symposium "Biosecurity at the Border". These events provided an opportunity for MAF staff to discuss a range of biosecurity issues with staff from all major government departments and crown research institutes.

Papers presented by MAF staff covered sea container pathways, assessments of biosecurity risks to indigenous flora and fauna, forestry/plant pest surveillance, border interceptions, as well as response updates on ant and moth incursions.

MAF sponsored the keynote presentation to the conference symposium by Dr Cas Vanderwoude (Queensland Department of Primary Industries and Fisheries) on efforts to eradicate red imported fire ants in Brisbane. Other papers covered a range of relevant entomological and biosecurity issues, such as new detection technologies, health assessments on wasps and mosquitoes, and insect pollination of GE crops.

Two field trips were arranged to allow the entomologists to add to their collections. The first outing was to the proposed site of a new wildlife reserve in Nelson similar to that at Karori, Wellington, with the second trip to the Nelson Lakes and nearby national parks.

MAF Biosecurity staff would like to thank Amelia Pascoe for organising MAF’s contribution and sponsorship of the conference.

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For abstracts from the conference: www.ento.org.nz/confabs04.pdf

Ant surveillance picks up incursions

With recent exotic ant discoveries in Napier and Wellington, the National Exotic Invasive Ant Surveillance Programme is again proving its worth.

The programme was initiated in March 2001 after red imported fire ants (RIFA) were found at Auckland International Airport in March that year. They were subsequently eradicated.

It has been designed with the aim of early detection of invasive ants, focusing on RIFA as the number one target species.

The programme has ensured the continual surveillance of high risk areas including international ports, container yards, transitional facilities and some nurseries. Over the last 3 years the programme has been responsible for the detection and subsequent response to a range of species including the crazy ant, yellow crazy ant, ghost ant, tropical fire ant and red imported fire ant. So far there has been no indication of these species having established outside border control areas.

Exotic ant incursions are keeping MAF incursion investigator teams busy as they respond to new discoveries in places where invasive ants have not previously been detected.

Red imported fire ant in Napier

Earlier this year RIFA was discovered at the port of Napier. RIFA is native to southern Brazil and is one of the world’s worst invasive ant species. It is a serious unwanted pest that will aggressively defend its nest, swarming out and over the mound to repeatedly sting anything that appears a threat.

RIFA can destroy seeds, commercial crops and other flora and is capable of killing reptiles and small mammals. It can also be attracted to electrical systems and cause short circuits. This particular species has become a serious environmental, economic and human health pest in Australia and the southern United States.

Continued on page 14
Trans-Tasman relationship strengthened

When it comes to footie or cricket, Trans-Tasman relations can be a little, well, prickly at times. But when Sally Griffin of MAF Biosecurity’s International Team attended an annual meeting of New Zealand and Australian biosecurity officials last month, she found it was all ANZAC mateship and cooperation, with no sign of the sledging and biff we sometimes see on the sports field.

The Australian and New Zealand Consultative Group on Biosecurity Cooperation (CGBC) had its 6th annual meeting in Canberra on 7 May. The agenda covered various market access issues, and allowed an opportunity for updates on the key issues preoccupying each country. The hospitality shown the New Zealand contingent was second to none and set the scene for a warm and sincere atmosphere in which to discuss the various issues.

One of the major agenda items was the country updates. Biosecurity Australia (BA) has been through an intensive period of work since the last CGBC meeting in March 2003, having released three of the “biggest import risk analyses known to man” (apples from New Zealand, a generic import risk analysis for pig meat, and bananas from the Philippines).

Other challenges for BA include working on Australia’s response to WTO cases, updating the import risk analysis handbook, negotiating the SPS provisions in the United States and Thai Free Trade Agreements, and dealing with the Cormo Express issue (as a result of which Australia is soon to establish a Veterinary Counsellor position in Dubai).

Barry O’Neil, Group Director of MAF’s Biosecurity Authority, gave a run down on New Zealand developments, focusing on the Government’s Biosecurity Strategy and consultation on strategy implementation. The Australians found this information to be extremely interesting as the current New Zealand Biosecurity Authority structure mirrors the Australian system.

The CGBC meeting received three reports from its working groups on plants, animals and operations. All three groups reported that their schedule for resolution of specific bilateral trade issues is nearing an end, leaving them the opportunity to move on to higher-level strategic cooperation in future.

From the perspective of a first timer at the CGBC, it was clear that the relationship with our Trans Tasman neighbours is going from strength to strength. The meeting was held in good humour, with both sides supportive and cooperative in their approach to issues of mutual interest.

It is certainly a good indication of the group’s success in the gradual working through of outstanding market access requests, and now with the future meetings looking to focus the continued cooperation on more strategic issues, our working relationship seems set to continue to prosper.

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Crazy ant in Wellington

An exotic ant incursion was discovered at the port of Wellington in March 2004. The surveillance programme at the port resulted in MAF incursion investigators being immediately sent to the site where they destroyed a nest of crazy ants.

The crazy ant is well-known as an invasive species. It is a serious predator of other insects, feeding on honeydew, fruit, and household food and is a significant household nuisance and hygiene pest. The crazy ant is native to Asia or Africa and has established in the southern United States and several Pacific countries.

Outlook

MAF’s national invasive ant technical advisory group has advised that an area needs to be confirmed free of invasive ant populations for at least 2 years before eradication can be confirmed. Response activities are aimed at containment, delimiting the spread and eradication of the new finds and ongoing monitoring of past treated sites.

Eradication treatments appear to have been effective, as there have been no further finds during follow-up surveys at most of the sites where MAF has discovered and responded to exotic ants.

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www.maf.govt.nz/fire-ants

Ants continued from page 13

If RIFA were to establish and spread in New Zealand, the annual cost to this country would be at least $318m. There are also unknown, but potentially significant environmental costs, such as the impact on New Zealand’s native plants and animals.

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If RIFA were to establish and spread in New Zealand, the annual cost to this country would be at least $318m. There are also unknown, but potentially significant environmental costs, such as the impact on New Zealand’s native plants and animals.
“How much of a pest will it become?” This is one of the most pressing questions in biosecurity whenever a new intruder slips through the net. Ecological modellers are proving that you don’t need a crystal ball to find how far and how fast a problem species is likely to spread.

Researchers have developed mathematical models to predict the potential spread of pest and weed populations. By combining geographical and climate data to infer the preferred destinations of the pest, the modelling approach can give a clear picture of what areas are under threat.

Dr Darren Kriticos of Forest Research is applying this technique to a number of pest species in New Zealand. Having spent many years at CSIRO Entomology in Canberra developing population models, he has brought his knowledge across the Tasman to help tackle pests which favour the same route.

**Australian-developed model**

Under contract to MAF, Darren is currently applying the CLIMEX model developed in Australia to predict where *Uraba lugens* (gumleaf skeletoniser) is likely to spread in New Zealand, and how bad it could get in different parts of the country. As part of the same contract he is also developing a population dynamics model of *Uraba*.

“This model helps us to figure out which life stages are best to target in pest control operations: the eggs, the caterpillars or the moths,” he explains.

While helpful in providing intelligence on likely enemy movements, models can also help to position the “good guys”. Working with the Forest Health group at Forest Research in Rotorua, Darren is also using models to predict the population dynamics of potential biological control agents.

“When considering biological control options, it is helpful to know whether the target species and the predator will occupy the same geographic range, and also when and where to release the predator. The CLIMEX model will help us answer these questions,” he says.

**War games**

The other burning question is whether the predator species is likely to provide effective control. “The population dynamics model will help us prioritise the agents depending upon which life stage(s) of the pest they attack. Obviously we want an agent that will do the most damage to the pest population.” Darren gets a gleam in his eye when discussing the strategic benefits of the modelling technology. “It allows us to play war games against the pest,” he smiles.

Not restricted to predicting the movements of crawling invaders, Darren has recently completed a project in conjunction with AgResearch to assess the threat of *Nassella trichotoma* (nassella tussock) to New Zealand pasture. This weed species is currently concentrated in the northern half of the South Island. It has the potential to become a scourge to pastures in the south east of the North Island, and throughout Canterbury and Otago (see map). Originally from Argentina, nassella tussock has been classified as a weed of national significance in Australia, where it is known as serrated tussock. There it is found in the cooler, moister parts of New South Wales and Victoria, covering an area the size of New Zealand.

**Planning containment strategies**

“By getting a clear picture of how far a problem species can spread, you can then use this information to focus surveillance efforts and work out the best strategies for containment,” Darren says. “One of the biggest problems facing biosecurity authorities is that of cost-benefit analysis. Mathematical models can take a lot of the guesswork out of broad scale pest management by demonstrating how money spent in one particular area could effectively save an entire region. You can only be sure of this if you know how big the problem could become if you do nothing.”

Darren Kriticos
of Forest Research –
applying modelling
technique to a
number of species.

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*nassella tussock* is currently concentrated in the northern half of the South Island. It has the potential to become a scourge to pastures in the south east of the North Island, and throughout Canterbury and Otago (see map). Originally from Argentina, nassella tussock has been classified as a weed of national significance in Australia, where it is known as serrated tussock. There it is found in the cooler, moister parts of New South Wales and Victoria, covering an area the size of New Zealand.

**Potential spread of nassella tussock in New Zealand. This is a vigorous weed species that threatens pastureland in dry areas.**

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North American conference highlights significant forestry pests

Nearly 200 forest entomologists, pathologists, and regulatory authority and forest industry representatives from Canada, Mexico, New Zealand, Puerto Rico and the United States, met during April in San Diego. They met to exchange information on recent developments in pests and diseases of Western North American forests.

It was the fifth Joint Meeting of the Western North American Forest Insect (WFICW) and Western International Forest Disease (WFIDW) Work Conference. Issues dear to our hearts, such as pitch canker, sudden oak death (SOD) and wood boring and bark beetles, were a major focus of the conference.

Dr Shiroma Sathyapala, National Adviser – Import Health Standards, attended from New Zealand.

The programme included six concurrent sessions on:

- regional research programme on bark beetles and pathogens of conifers in North American forests
- current status of the eradication programme for SOD in Western North America
- tree diseases and mortality in California forests impacted by ozone
- research on pitch canker in Central Sierra Nevada
- USDA Healthy Forests Restoration Act
- databases for pest information and tree mortality.

The WFIDW had working group committees to exchange current research findings and issues in nursery pathology, dwarf mistletoe, rust diseases, root diseases and hazard trees.

Dr Mark Stanley, Chair of the Californian Oak Mortality Task Force highlighted the emergency measures taken in response to the detection of Phytophthora ramorum in Monrovia Nursery in California. The Task Force focuses on the potentially devastating effects of the pathogen, which caused an outbreak of SOD and which is killing large numbers of the native oaks and tanoaks in California’s coastal regions. He outlined the use of risk/hazard maps based on host plants, nursery imports and climate in identification of the areas most at risk from SOD.

Other useful presentations included:

- Research and management of nursery diseases, pitch canker, SOD and Cylindrocarpon
- Transmission of pitch canker by seeds and early detection in nurseries. This is significant, as the outbreaks of pitch canker in Chile and South Africa were detected in nurseries
- Change of nectria canker disease patterns in hardwood and conifer species and future research on identification of disease development and control
- Latest research findings on the role of endemic saprotrophic beetle fauna in SOD diseases, progression and relationships between *P. ramorum* canker and failure potential in coast live oak. This information has provided a significant input for SOD risk assessment studies in New Zealand.

The group praised MAF’s quarantine measures, which led to the detection of pitch canker pathogen *Fusarium circinatum* in Douglas fir scion material imported from California.

On the third day of the conference a field trip to Cleveland national forest demonstrated the devastating effects of the recent forest fires which destroyed over 140,000 hectares of forest. In addition, excessive tree mortality due to a combination of attacks of root diseases *Armillaria*, *Heterobasidion annosum*, Western pine beetle (*Dendroctonus brevicomis*), *Ips* spp and dwarf mistletoe (*Arceuthobium occidentale*) suggested necessity for an integrated pest management strategy to reduce tree losses. All these pests and pathogens are unwanted organisms in New Zealand.

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Gypsy moth and fall webworm responses – No news is good news

Gypsy moth and fall webworm responses are entering a quiet period. No activity of these extremely voracious pests has been detected in Hamilton and Auckland since March last year. None of the pests have been detected – either in the intensive trapping grids, by ground search, or by the alert residents of Hamilton and Auckland.

On 23 April 2004, MAF convened the gypsy moth and fall webworm Technical Advisory Group to seek advice on actions for the coming period. On the strength of the expert advice it has received, MAF will:

- maintain intensive trapping grids until end of the season in April 2005
- maintain public awareness of the pests
- organise one last ground search for caterpillars in December 2004.

If no further activity is detected by April 2005, experts advise that the battle against gypsy moth and fall webworm will have been won, and MAF will be able to proudly declare eradication achieved.

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Surveillance for two serious forestry pests refined

Wood boring and bark beetle (WBBB) and gypsy moth surveillance are high impact exotic pests that could establish in New Zealand. The surveillance programmes run by MAF Forest Biosecurity for these pests have been reviewed, and operational changes made for the recently completed trapping season.

Potential disease vectors

The term wood boring and bark beetles describes a large range of Coleoptera in the families Curculionidae (Scolytinae, Platypodinae etc.), Buprestidae, Cerambycidae etc. WBBB are frequently intercepted at New Zealand ports after travelling from other parts of the world in timber, wood products and dunnage. They are a threat to both exotic plantation and urban forests. Not only is the physical damage caused by these beetles undesirable, but many species are potential vectors for diseases such as pitch canker \((Fusarium circinatum)\) or pine wilt nematode \((Bursaphelenchus xylophilus)\).

Nationally, WBBB surveillance consists of 120 trap clusters near risk sites for this group. Each cluster comprises five Lindgren traps baited with a lure or attractant. The combinations being used have been proven to attract a wide range of target species in MAF-funded field trials in the United States.

In its first year (2001/02), WBBB surveillance confirmed that no new to New Zealand WBBB species had established. During the following season, ports and timber yards were targeted. In the 2003/04 trapping season (November – April), trap clusters were removed from risk sites and placed in the nearest suitable conifer plantings. This improves the capacity to actually detect a newly established population rather than intercepting beetles emerging from risk goods.

Gypsy moth disperses widely

Gypsy moth \((Lymantria dispar)\) is familiar to most New Zealanders interested in biosecurity. It feeds voraciously on many different tree species and its biology enables it to move around the world with ease. For example, egg masses are often hidden on vehicles, containers and ships; it has the ability to suspend normal development when conditions are unfavourable to growth; and larval ‘ballooning’ allows them to disperse widely on air currents. Imported containers, used vehicles and the ships that transport them from countries such as Japan or the Russian Far East are considered particularly high risk pathways for gypsy moth.

Gypsy moth surveillance has been running for 10 years, and resulted in the detection of a male gypsy moth in Hamilton in March 2003. Nationally, gypsy moth surveillance uses 1100 traps which are checked fortnightly from November to April. After the Hamilton detection, it was concluded that trap deployment in a grid pattern would assist in locating populations if future detections were made. Grids 750 metres square are placed around identified risk sites, with a trap located in each grid square out to 1.5 km from the site centre. A series of buffer zones using the same specifications are placed around port entrances and other areas where there is a reasonable probability of larvae ballooning from infested ships.

A significant advance in both programmes has been the comprehensive use of GIS systems to map high risk sites and the trapping grids. The current service provider, AgriQuality records GPS coordinates for every WBBB and gypsy moth trap to provide MAF with accurate trapping maps. This allows rapid visual identification of any errors or gaps. Future work will concentrate on increasing our ability to identify risk sites for these two pest groups.

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Increased scrutiny paying dividends

Look, and you will find. That aphorism certainly rings true since MAF has stepped up inspections of incoming sea containers. And what’s been found is that even containers classified as low-risk can conceal significant biosecurity risks.

Nearly 700 reports of contamination in containers have been received from accredited persons undertaking container checks since the new Sea Container Standard was implemented on 1 January 2004.

These finds have included everything from small amounts of soil and seeds, which were swept out of containers and put into Quarantine bins on site, to live insects, spiders, snails, lizards and a cane toad. While most of these reports are from loaded containers, accredited persons at transitional facilities cleaning empty containers have also reported finding live ants, cockroaches and soil. Insects, spiders and contaminated wood packaging each make up about a quarter of the reported interceptions. The remaining quarter is mainly seeds and soil, with a few incidents of other types of contaminants, including leaves, grass, other plant material and manure.

Accredited persons have found 13 containers with red-back spiders, six with lizards and three with frogs or toads. Some recent finds include:

• two separate interceptions of containers with live larvae of the Australian white cedar moth (*Leptocneria reducta*); these are the same family (Lymantriidae) as painted apple moth and Asian gypsy moth, but with only a single known host
• two separate interceptions of false powder post beetle (*Sinonyx anale*) in wood packing material
• more than 20 interceptions of containers with live ants, including *Paratrechina longicornis*, *Anoplolepis gracilipes*, *Camponotus pennsylvanicus* and other species.

As at 21 April 2004, 8770 accredited persons had been trained either by MAF Quarantine Service staff, approved personnel from a contracted service provider, AgriChain Centre Limited, or through the MAF web-based training module. The training will be devolved to the private sector from 1 July 2004.

The contamination found by accredited persons, which is close to half of all the contaminated loaded containers reported in 2004, demonstrates the value of having low-risk containers checked by accredited persons, both on the wharf and during devanning. The data from these interceptions will be assessed to identify predictive associations between the incidence of contamination and factors such as port of loading, exporter, type of cargo and goods origin. As new profiles are identified, these will be used to further define and refine MAF’s specification for high-risk containers. All high-risk containers are stopped by MAF for external and/or internal inspection, as required.

**Training for accredited persons**

The *Import Health Standard for Sea Containers* requires that containers be given a basic biosecurity check by an accredited person prior to receiving biosecurity clearance.

The check involves examination of the exterior and interior of the container and any packing material for contaminants that may pose a biosecurity risk. The accredited person is usually (but not always) an employee of the importing organisation or their agent. There are also requirements for the accredited person to contain any contamination found, report it to MAF and to keep records relating to their biosecurity activities.

During the initial phase of the standard, the MAF Quarantine Service provided training both in the classroom and via the internet. This training was Crown funded and no charge was made to industry. From 1 July 2004, the training of accredited persons will be contracted to the private sector.

To ensure the quality and consistency of service, a draft document has been produced outlining the requirements for training accredited persons. All training providers will need to comply with the requirements outlined in the final document.

Organisations wanting to provide training for accredited persons are invited to submit applications for approval based on the draft document.

For copies of the draft document 
Requirements for Organisations Providing Training on Behalf of the Ministry of Agriculture and Forestry Border Management Group look under Border Management at:  
www.maf.govt.nz/biosecurity/consultation.htm

For hard copies: 
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Comments on the document should be provided to Tricia Caughley by 15 July 2004.
Wildlife at the borderline

In *Biosecurity* 51:21 we reported on the discovery of a live frog in the in-flight salad served to a passenger on a flight to New Zealand. The report generated world-wide media interest and raised the pertinent question: what happens to viable wildlife intercepted at New Zealand’s borders? Ann Panoho, MAF’s representative on the Wildlife Enforcement Group, a multi-agency group comprising representatives from DOC, Customs and MAF, explains what happens.

Whether it’s a frog in a salad, a lizard in underwear, or plants in a suitcase, our borders are subject to increased pressure from incursions of plants and animals. Some may be hitchhikers and some a criminal attempt to smuggle unauthorised goods into New Zealand.

MAF’s main concern is biosecurity and protecting New Zealand from the pest or disease risk that smuggled flora and fauna can present. Another consideration is The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This is administered by the Department of Conservation (DoC) but also impacts on MAF through both the Trade in Endangered Species Act and the Biosecurity Act.

MAF is required by legislation under the Biosecurity Act to notify DoC when something listed under CITES schedules 1, 2 or 3 may have been located. While containing risk is paramount, the plant or animal involved may be an endangered species. In these cases, DoC would consider repatriation – or at least some solution other than death and destruction.

For example, chameleons intercepted in New Zealand were placed at a zoo in the UK after the necessary health permits had been issued. In another case, parrot eggs intercepted in New Zealand were taken to Singapore’s Jurong Bird Park before they hatched. A clutch of New Zealand-bound rare parrots intercepted by British authorities at Heathrow were incubated and most of the birds were saved. Had these birds made it to New Zealand, they probably would have been destroyed. The most desirable time to relocate in the case of birds is while they are still eggs; after hatching, the disease risk is greater.

Repatriation or relocation of intercepted flora and fauna can be difficult, as couriers are often unwilling to divulge where the specimens were sourced.

And why was the frog in the salad not returned to its Australian homeland? Unfortunately for the frog, notwithstanding the disease risk it may have posed, it was a whistling tree-frog *(Litoria verreauxii)* – a widely-distributed species found in abundant numbers.

Consultation on changes to import requirements for plants

MAF is responsible for setting and reviewing the import requirements for plants and plant products and is committed to consulting with interested parties when these requirements are revised.

“MAF understands that not everyone is aware of the consultation process,” says Dr Gerard Clover, National Adviser – Nursery Stock.

“In order to address this issue, MAF has allocated extra resources to make sure that this information is available to interested parties.

“Whenever changes in these requirements are proposed, MAF consults with affected parties such as importers and growers, to ensure that we are fully informed about the potential impact of any proposed changes.”

Consultation normally lasts about 6 weeks. MAF also consults, via the World Trade Organisation, with overseas countries from which New Zealand sources plants. “As a result of the comments made during consultation, the Plants Group frequently makes changes to the proposed requirements, for example the adoption of alternative treatments or changing the introduction date,” Gerard says.

“The only exception to this consultation process is when changes are minor or must happen urgently – for example, if there is a new disease outbreak overseas.”

MAF is unable to write individually to each person who may be affected by the revised import requirements and has therefore adopted three ways in which to notify people in New Zealand of proposed changes:

1. **Email notification**

   MAF has set up various free email lists to which anyone can subscribe by providing details of their area of interest and email address (see www.maf.govt.nz/bio-lists).

   By joining the “Plant Imports” list you will receive notifications of all proposed changes to import requirements for plants and notification when these changes are introduced.

2. **The internet**

   The Plants Group publishes details of all proposed changes to import requirements for plants on MAF’s website:


3. **Biosecurity magazine**

   The Plants Group publishes details of proposed changes to plant import requirements and notification when these changes are introduced in the “Update” section of MAF’s magazine *Biosecurity*. To be added to the distribution list for this free publication, please contact:

   Biosecurity Magazine, MAF Biosecurity Authority, PO Box 2526, Wellington, phone 04 474 4100, fax 04 498 9888, biosecurity@maf.govt.nz

Biosecurity Issue 52 • 15 June 2004
Plant protection conference in The Netherlands

Veronica Herrera from MAF Plants Biosecurity and Brett Alexander from the National Plant Pest Reference Laboratory recently attended the European Plant Protection Organisation (EPPO) Conference held in Noordwijkerhout, the Netherlands. The conference covered papers on the quality of diagnosis and new diagnostic methods for plant pests.

Accreditation a challenge

The conference focused on accreditation of plant pest diagnostic laboratories and techniques for plant pest identification. Many laboratories are required to become accredited to NZS/ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories).

However this is proving to be a big challenge for most laboratories due to the energy and resources needed to implement the necessary systems and processes for accreditation. Part of the problem is also related to small numbers of validated tests, the poor availability of reference material and deficient proficiency testing. Findings from the conference will be reported to the EPPO council with recommendations for preparing guidelines for laboratory accreditation. These guidelines may help to facilitate the process for different laboratories.

Reference collections at risk

The role and fate of reference invertebrate and microbial collections was also discussed. Despite their importance, collections generally have insufficient resources for conservation and curation, creating a risk that unique material and data may be lost.

Taxonomists are also becoming fewer, with some groups of organisms receiving little or no attention. It was proposed that possibly the only solutions reside at the European or perhaps international level, by creating a merger of collections and centres of excellence. Recommendations will be presented to the EPPO council.

Diagnostic techniques

Papers at the conference also discussed a range of immunological and molecular techniques within the context of sampling, validation and proficiency testing. Newer techniques such as the use of real time PCR (polymerase chain reaction) and distant analysis as tools for pathogen and invertebrate identification were discussed. Several presenters talked about more advanced tools such as the use of micro-arrays, potentially enabling the identification of a large number of pathogens in one test. However these tools are still at an experimental stage.

Field visits

During the conference, delegates visited Naktuinbouw and the BKD Bloembollenkeuringsdienst Institute. Naktuinbouw, the Netherlands Inspection Service for Horticulture, monitors and promotes the quality of products, processes and chains relating to the production of propagating material. Naktuinbouw also offers a wide range of services for the floricultural, arboricultural and vegetable sectors. BKD specialises in the inspection and testing of a variety of bulbs species such as tulips, lilies and hippeastrum.

Veronica Herrera, Manager Plant, Imports Team, veronica.herrera@maf.govt.nz

Brett Alexander, Team Leader, Pathology, Virology and Nematology, brett.alexander@maf.govt.nz
GMOs: after the moratorium was the focus of the XIIth International Eurofins seminar this year in Paris, 26-27 February. Attended by MAF Plants Biosecurity Adviser Kathryn Hurr, the seminar canvassed a range of topics including consumer acceptance, the new European labelling and traceability regulations, GMO detection methods, and co-existence between conventional and biotechnology derived crops.

“Europe is not in a post-moratorium state at the moment”, says Kathryn, “although approvals to grow biotech maize are currently being considered in Great Britain, and Germany plans to authorise biotech maize later on this year.”

While consumers in some countries do not appear to be concerned about eating products derived from modern biotechnology, consumers in other countries showed reluctance to a degree that legislation was put in place which requires labelling of such products.

However, labelling regulations in most countries take into account that a certain degree of adventitious GM presence is unavoidable. Therefore thresholds were introduced below which labelling is not required. These threshold levels differ between countries and range from 0.9% in Europe to 5% in Japan.

In order to comply with these regulations, systems had to be developed which allow the detection of presence or absence of genetically modified material and, in the case of presence, accurately determine the amount. Quantitative PCR is the most commonly used technique for assessing the amount of biotechnology-derived genes present within a sample. The technique is specific and can detect these genes even at low levels.

The quantification of GMO has a significant impact on all involved: farmers, traders, producers and consumers. Any rejected load has cost implications, often for both buyer and seller. In order to have reliable results, independent analytical laboratories need to have rigorous quality assurance systems in place as well as being recognised by the competent authorities.

New Zealand currently has a “zero tolerance” policy for imported seed for sowing. Imported food is permitted to contain up to 1% GM presence, providing that the GM is a New Zealand Food Safety Authority-approved variety for food and/or feed.

Biosecurity interests considered at international civil aviation conference

The increased international movement of aircraft, passengers and freight creates critical biosecurity risks to New Zealand. Significant effort is being put into developing innovative methods for the managing biosecurity risks in this pathway.

Involvement in forums such as the International Civil Aviation Organisation (ICAO) enables New Zealand to be at the leading edge of the development of border management initiatives.

Eighty two contracting states and seventeen observer organisations attended the Twelfth Session of the ICAO Facilitation Division, held in Cairo Egypt from 22 March to 2 April 2004.

The Facilitation Division meets every eight to ten years to consider changes to standards and recommended practices contained in Annex 9 of the Chicago Convention. The Convention deals with global requirements for civil aviation. Neil H Hyde, Director Border Management, MAF Biosecurity, was alternate Delegation Leader for New Zealand and represented MAF.

Air curtain technology discussed

A wide range of facilitation issues were discussed in respect of the movement of aircraft, passengers and freight between countries. Of particular relevance to biosecurity in New Zealand were papers dealing with the use of air curtains as an alternative to chemical aircraft disinsection. It was agreed that non-chemical methods of disinsection would be used where these were approved by the World Health Organisation and the contracting state. New Zealand and Australia are jointly reviewing the United States-led air curtain trial results. There are some limitations that will need to be resolved before the technology is considered for use.

Pre-arrival assessment

Also discussed were advanced passenger information and the use of biometric identification. This is especially relevant to the work New Zealand is doing internationally on the concept of pre-arrival risk assessment of passengers for biosecurity purposes. Pre-arrival risk assessment has significant facilitation and cost benefits.

New Zealand has agreed to assist in the development of the biosecurity section of a proposed facilitation manual. The manual will provide the technical detail necessary to enable contracting states to comply with standards and recommended practices in Annex 9.

Other agencies

Other agencies represented in the New Zealand session delegation were the Ministry of Transport, New Zealand Immigration Service, New Zealand Customs Service and New Zealand Passports Office. Air New Zealand attended as an observer.

Kathryn Hurr, phone 04 474 4157, fax 04 474 4257, Kathryn.Hurr@m党风t.govt.nz

Neil H Hyde, Director Border Management, MAF Biosecurity Authority, neil.hyde@m党风t.govt.nz
A fungus new to New Zealand, *Naohidemyces vaccinii*, or blueberry rust, was detected on rabbiteye and highbush blueberries in the Waikato in January of this year. The presence of this disease in New Zealand cannot be linked to any recent importations and it is possible that it has blown across from Australia where the disease has been present in New South Wales since 2001.

MAF National Plant Pest Reference Laboratory and HortResearch scientists prepared fact sheets on the rust for blueberry growers. This assisted with grower identification, reporting of new infected sites and management options. MAF also undertook a survey that showed the rust was widely distributed in the Waikato and grower submissions confirmed its presence in the Bay of Plenty.

Rusts are epidemic diseases that are usually widely distributed by the time they are detected, and consequently eradication is not feasible. Based on world experience with this and other rust diseases, MAF considers it is inevitable that it will spread throughout the country unless climatic barriers prevent the disease from becoming a problem.

Blueberry rust appears as reddish spots on the upper surface of leaves. As the rust develops it forms clumps of orange-yellow spores on the undersides of leaves. Leaves may discolour and eventually fall.

The severity of this disease depends on the susceptibility of the host plant, number of rust spores present and on weather conditions. Rust spores require moisture for germination but dry conditions for dispersal. The fungus can produce large numbers of spores which can spread long distances by the wind.

In response to these considerations, the blueberry industry is investigating appropriate measures to manage this disease. Measures under consideration include:

- use of resistant varieties
- chemical controls
- procedures to limit the effects and slow the spread of this rust.

This may include measures applied to nursery stock, and hygiene precautions taken when people from non-infected areas visit blueberry properties in regions that now have the disease.

John Randall,
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**New and amended import health standards issued – Animals**

**Pre-cooked heat-and-eat meals containing animal products for human consumption from Canada, European Community and the United States**

Canada and the United States have been added to the clauses advising that importation of commercial consignments of beef products are subject to approval from the New Zealand Food Safety Authority (NZFSA). An additional clause states that all edible animal products must also comply with the Food Act 1981. Importers are advised to check with NZFSA prior to importation for details of the restrictions.

The new standard is dated 20 April 2004 and replaces that dated 20 August 2003.

**Specified products for human consumption containing dairy products, eggs or meat**

As well as the above addition, two requirements have been added to Clause 8.6 of this standard EDIPROIC.ALL. This clause relates to the importation of private consignments of dried meat products from other mammalian species and reptiles. The requirements now state that the products must be shelf-stable and must not contain bone.

The new standard is dated 20 April 2004 and replaces that dated 24 April 2003.

**Fish food, fish bait, *Artemia salina* and *Artemia franciscana* from all countries**

The manufacturer’s declaration must now be signed by the manager, not the manufacturer.

The new standard is dated 20 April 2004 and replaces that dated 12 January 2004.

**Spray-dried bovine and porcine blood products for further processing into animal food from the United States**

The following changes have been made to this standard:

- Animal food definition changed to remove ruminants and mammalian animal species replaced with non-ruminant animals.
- Added Specified Risk Materials (SRMs) to definitions. The definition used is that from EU Regulation 999/2001 and is included in the petfood import health standards.
- Clause 9.3 of the Veterinary Certificate regarding BSE country freedom for bovine products has been replaced with:

  “In the case of bovine blood products: The products do not contain any specified risk materials (SRMs). (Note: See Section 3 for definition of SRMs.)”

The new standard is dated 20 April 2004 and replaces that dated 12 January 2004.
Shelf-stable petfoods containing animal products
In the Eligibility section several cross-references to other import health standards have been changed. PETBOVIC.EEC has been revoked so references to this standard have been removed from clauses 8.2 and 8.4, where it has been replaced by reference to FODPPPIC.EEC. In clause 8.8 reference to PETBOVIC.EEC has also been removed; there is no longer an IHS for dried pelleted petfoods containing bovine material from the EU for pets other than dogs and cats. Clause 8.3 has had a note added stating that cooked petfood ingredient products from the European Union can now be imported under the FODPALIC.EEC.

Following the BSE case reported there, the United States has been added to notes excluding imports of bovine products from specified counties under certain clauses. The clauses that bovine products from the United States are now excluded from being imported under are 8.2, 8.3, 8.4, 8.6 and 8.8.
The new standard is dated 20 April 2004 and replaces that dated 12 January 2004.

Specified bee products from all countries
Clause 6.6 regarding medicines, health foods and tonics containing bee products such as pollen, royal jelly, propolis, honey and bee venom has been changed to allow for products packaged in sachets to be imported.
This standard is dated 25 March 2004 and replaces that dated 1 May 2003.

Horses from Australia
Clause 4 of Veterinary Certificate A has been removed as it duplicated examination already covered in Clauses 3.1 and 6.2.
The standard is now is dated 31 March 2004 and replaces that dated 24 September 2003.

Horse semen from Australia
The Establishment of Origin Clause 1.1, regarding EVA, has been re-worded to clarify that the donor stallions must have been resident for the 30 days prior to export on premises where EVA shedder stallions are not known to have been present during that time. The updated standard is dated 31 March 2004 and replaces that dated 11 August 2003.

Non-viable animal specimens from all countries
Eligibility clauses 6.1 and 6.3 have been amended to remove post clearance specifications for intended use. Clause 6.5 has had the option of pre-export treatment for dried insects added.
This standard is dated 11 May 2004 and replaces that dated 25 September 2001.

Equipment used with animals
A note has been added to the Eligibility section stating that there is no import health standard for used beekeeping equipment.
The amended is dated 11 May 2004 and replaces that dated 26 September 2002.

Dairy product samples for evaluation
Clause 7.2.2 in Eligibility has been amended to 'the product must be in the original, unopened, manufacturer's packaging'. This standard is dated 11 May 2004 and replaces that dated 4 December 2002.

Cooked fish from all countries
Three changes to this standard:
- reference to fresh water fish has been removed from the title
- A model veterinary certificate has been added; and
- clause 8.3 has been updated for clarification purposes.
This standard is dated 11 May 2004 and replaces that dated 23 May 2002.

Egg powders from the European Union
This is a new import health standard that was notified for consultation in Biosecurity 49:17. Following a review of submissions received, the standard has been issued and is dated 11 May 2004.

Ornamental fish and marine invertebrates from all countries
The following species of coral have been added to this standard as the Environmental Risk Management Authority has determined that they are not new organisms:
- Capnella imbricata
- Lobophytum pauciflorum
- Sarcophyton glaucum
- Sinularia brassica
- Sinularia flexibilis
- Sinularia notanda
- Sarcophyton tenuispiculatum

The standard remains dated 24 May 2002.

Alpacas and llamas from Australia
This is the revised standard following the version notified for consultation in Biosecurity 46:19.
The standard is now dated 14 May 2004 and replaces that dated 4 December 2002.

Bovine semen from Canada
The clauses in relation to infectious bovine rhinotracheitis virus (IBR) and bovine viral diarrhoea virus (BVDV) have been amended. The new standard is now dated 17 May 2004 and replaces that dated 24 February 2004.

Malayan sunbears (Helarctos malayanus) from Australia
This is a new standard dated 18 May 2004, which was notified for consultation in Biosecurity 50:19.

Canine semen from South Africa
This is a new standard dated 31 May 2004, which was notified for consultation in March 2004.

Kerry Mulqueen,
National Adviser,
Animal Imports and Exports,
phone 04 498 9624, fax 04 474 4132,
mulqueenk@maf.govt.nz
www.maf.govt.nz/animal-imports
Codes of ethical conduct – approvals, notifications and revocations since the last issue of Biosecurity

All organisations involved in the use of live animals for research, testing or teaching are required to adhere to an approved code of ethical conduct.

Codes of ethical conduct approved: Nil

Transfers of code of ethical conduct approved: Nil

Amendments to codes of ethical conduct approved: Nil

Notifications to MAF of minor amendments to codes of ethical conduct: Nil

Notifications to MAF of arrangements to use an existing code of ethical conduct:

• Animal Breeding Services Ltd (to use AgResearch Ltd’s code and Ruakura AEC)

Codes of ethical conduct revoked or expired or arrangements terminated: Nil

Approvals by the Director-General of MAF for the use of non-human hominids: Nil

Approvals by the Minister of Agriculture of research or testing in the national interest: Nil

Linda Carsons,
Senior Policy Adviser, Animal Welfare,
phone 04 470 2746, fax 04 498 9888,
linda.carsons@maf.govt.nz

Draft import health standards for consultation – Plants

Import requirements for nursery stock – Insecticide, miticide and fungicide treatments

As part of the consultative process in the revision of the mandatory fungicide, insecticide and miticide treatments required for nursery stock imported into New Zealand, MAF has distributed the following draft document for public consultation and comment:

Import requirements for nursery stock – Insecticide, miticide and fungicide treatments

The document is available on MAF’s website:

www.maf.govt.nz/biosecurity/consultation/

Comments on these draft documents should be forwarded to MAF by close of business on 11 June 2004. Depending on the results of consultation, it is anticipated that the new requirements will be in place by July 2004. MAF encourages respondents to forward comments electronically to the email address below. However, you may wish to forward submissions in writing, please send them to the address that follows:

Plant Imports – Consultation on Nursery Stock Treatments, Plants Biosecurity, MAF Biosecurity Authority, PO Box 2526, Wellington, New Zealand, phone +64 4 498 9843, fax +64 4 474 4257, plantimports@maf.govt.nz

Draft Documents for Consultation – Breadfruit (Artocarpus altilis) from Samoa

As part of the consultative process in the development of the import health standards for fresh breadfruit (Artocarpus altilis) from Samoa, MAF has distributed the following draft documents for public consultation and comment:

Draft Import Health Standard

Datasheets for regulated pests

PRA spreadsheet

These documents are available on MAF’s website:

www.maf.govt.nz/biosecurity/consultation/

Comments on these draft documents should be forwarded to MAF by close of business on 8 June 2004. MAF encourages respondents to forward comments electronically to the email address below. However, should you wish to forward submissions in writing, please send them to the address that follows:

Plant Imports – Consultation on breadfruit, Plants Biosecurity, MAF Biosecurity Authority, PO Box 2526, Wellington, New Zealand, phone +64 4 498 9843, fax +64 4 474 4257, plantimports@maf.govt.nz

Entry conditions for Actinidia nursery stock and seed for sowing

The import health schedules of entry conditions for Actinidia nursery stock and seed for sowing were amended in May 2004. The new requirements can now be found in the revised version of MAF’s import health standards

155.02.05 Importation of seed for sowing


155.02.06 Importation of nursery stock


The analysis of submissions made during consultation is available on:

www.maf.govt.nz/biosecurity/consultation/

Plant Imports, Plants Biosecurity, MAF Biosecurity Authority, PO Box 2526, Wellington, New Zealand, phone +64 4 498 9843, fax +64 4 474 4257, plantimports@maf.govt.nz

Changes to import permit requirements for the importation of grains and seeds for processing and consumption

In March 2004 MAF Plants Biosecurity reviewed the import requirements for grains and seeds for consumption or processing as held in MAF Import Health Standard PIT-GFP-PHR:

www.maf.govt.nz/seeds-processing-consumption.htm

This review identified that some minor changes were required to generic import requirements for grains and seeds for consumption or processing. Importers are currently required to obtain import permits for all grains/seeds other than for those
consignments that are imported and heat treated on arrival at the New Zealand border. Currently MAF Plants Biosecurity uses the import permit system for import management and to collect data on the volume of imports and monitor the identity of importers. However, the use of improved databases by MAF Quarantine Service has improved data gathering ability (by volume, origin and importer) to such an extent that it was concluded that the requirement for importers to obtain import permits for some consignments was unnecessary.

Import permits are now only required for those consignments of grains/seeds (imported under one of several import options) for viable seeds that are directed to MAF-approved transitional facilities for processing or further treatment. Importers are no longer required to obtain an import permit for consignments of grains/seeds that receive biosecurity clearance at the border after meeting all import requirements and passing inspection.

As these changes to the PIT/GFP-PHR standard were considered to be trade facilitative and of a minor nature, they were implemented immediately on 25 May 2004 with notification being provided to the international community and stakeholders at that time.

Dr Dave Nendick, National Adviser – Grain for Processing, Plants Biosecurity, MAF Biosecurity Authority, PO Box 2526, Wellington, New Zealand, phone +64 4 474 4200, fax +64 4 474 4257, dave.nendick@maf.govt.nz

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**Directory**

New organism records: 29/03/04 – 14/05/04

Biosecurity is about managing risks – protecting the New Zealand environment and economy from exotic pests and diseases. MAF Biosecurity Authority devotes much of its time to ensuring that new organism records come to its attention, to follow up as appropriate. The tables below list new organisms that have become established, new hosts for existing pests and extension to distribution for existing pests. The information was collated by MAF Forest Biosecurity and MAF Plants Biosecurity during 29/03/04 – 14/05/04, and held in the Plant Pest Information Network (PPIN) database. Wherever possible, common names have been included.

### ANIMALS BIOSECURITY RECORDS 29/03/2004 – 14/05/2004

#### Validated new to New Zealand records

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pheidole proxima (bigheaded ant)</td>
<td>Under stone in backyard</td>
<td>Hawke’s Bay</td>
<td>NPPRL</td>
<td>A predator and granivore currently only known from Queensland, Australia. Numerous specimens were collected during the red imported fire ant response from the Port of Napier and from residential properties within a 500 metre radius of the red imported fire ant nest site. Fourteen public submissions were also received from the area, the most distant being from Taradale, approximately 15 kilometres southwest of the port. There are three other Pheidole species already present in New Zealand. The Invasive Ant Technical Advisory Group meeting to be held in late July will be discussing this find.</td>
</tr>
<tr>
<td>Pison ?ruficorne (Sphecid wasp)</td>
<td>Window ledge</td>
<td>Auckland</td>
<td>Landcare Research</td>
<td>Described in Queensland, and recorded in Victoria (Australia). All Pison species are spider predators, and are capable of stinging. The females construct nests that they provision with prey for their offspring. Nesting behaviour varies greatly with most species constructing mud nests either as free standing aerial structures or lines of cell in pre-existing cavities, but some nest in dry sandy soil. Two specimens were collected from a window ledge at the Auckland University – one in March 2001, and the second in December 2003. The query on species identification is due to a minor variation in morphology that may be due to population difference. A modern revision of the species would be required to confirm this. More information is being sought.</td>
</tr>
<tr>
<td>Sympriesis sericeicornis (Eulophid wasp)</td>
<td>Phyllonorycter messaniella (Oak leaf miner)</td>
<td>Auckland</td>
<td>Landcare Research</td>
<td>A polyphagous and hyperparasitoid with over 100 hosts mostly lepidopterans, but including coleopterans, dipterans and other hymenopterans. Overseas S. sericeicornis has been used in the biological control of gracilariid lepidopterans Phyllonorycter crataegella and Phyllonorycter propinquiquella. This particular specimen was reared from an agromyzid fly which was collected by Crop &amp; Food Research in June 2002. More information is being sought.</td>
</tr>
<tr>
<td>Cimrospilus vittatus (Eulophid wasp)</td>
<td>(Diptera: Agromyzidae) Indet.</td>
<td>Auckland</td>
<td>Landcare Research</td>
<td>A polyphagous and hyperparasitoid with over 100 hosts including dipterans, lepidopterans, coleopterans and other hymenopterans. Overseas C. vittatus has been used in biological control of lepidopterans Phyllonorycter crataegella and Stigmella mulella. This specimen was reared from an agromyzid fly which was collected by Crop &amp; Food Research in June 2002. More information is being sought.</td>
</tr>
<tr>
<td>Solenopsis invicta (red imported fire ant)</td>
<td>Ant bait pots</td>
<td>Hawke’s Bay</td>
<td>NPPRL</td>
<td>A nest of these aggressive, stinging ants was detected at the Port of Napier in February 2004 through MAF’s national invasive ant surveillance programme. (See page 13 of this issue.) The nest was destroyed and an intensive local surveillance and a targeted publicity campaign have resulted in no further finds. Monitoring of the treated site will continue over the winter and surveillance activities will be repeated next summer to confirm eradication success.</td>
</tr>
</tbody>
</table>

**Website**

Animals records: Amelia Pascoe, Programme Coordinator, Exotic Animal response, Animal Biosecurity, ph 04 470 2785, fax 04 474 4133, amelia.pascoe@maf.govt.nz
PLANTS BIOSECURITY RECORDS 29/03/2004 – 14/05/2004

Validated new to New Zealand reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oziella yucca</td>
<td>Yucca elephantipes (yucca)</td>
<td>Auckland</td>
<td>National Plant Pest Reference Library (NPPRL)</td>
<td>This host-specific mite was detected during MAF’s survey for the mite Cecidophyopsis hendersoni. DoC has been informed of this detection.</td>
</tr>
</tbody>
</table>

New host reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symmetrischemia plaesiosema</td>
<td>Capsicum annuum (capsicum, green pepper)</td>
<td>Auckland</td>
<td>NPPRL</td>
<td>Other PPIN hosts include tomato and pepino.</td>
</tr>
<tr>
<td>Pseudomonas viridiflava (bacterial rot, blossom blight, leaf spot)</td>
<td>Hydrangea sp. (hydrangea)</td>
<td>Dunedin</td>
<td>NPPRL</td>
<td>Other PPIN hosts include kiwifruit, grape, cucurbits, tomato, passionfruit, pea, apricot, green bean, onion, nectarine, capsicum, carrot, blueberry, kawakawa, oca, chicory, radish, olive, feverfew, and parsley.</td>
</tr>
<tr>
<td>Verticillium dahiae (verticillium wilt)</td>
<td>Coreopsis verticillata (thread leaf coreopsis)</td>
<td>Auckland</td>
<td>NPPRL</td>
<td>Other PPIN hosts include Prunus spp., cucurbits, aster, aubergine, avocado, bachelor's button, bean, boronia, broad bean, capsicum, carnation, casana, chrysanthemum, copper bee, grape, kiwifruit, nashi, olive, rose, potato, strawberry, and tomato.</td>
</tr>
<tr>
<td>Harzia acronomioides (no common name)</td>
<td>Vaccinium ashei (blueberry, rabbit eye blueberry)</td>
<td>Wellington</td>
<td>NPPRL</td>
<td>Other PPIN hosts include kiwifruit and avocado.</td>
</tr>
<tr>
<td>Pseudomonas viridiflava (bacterial rot, blossom blight, leaf spot)</td>
<td>Vaccinium ashei (blueberry, rabbit eye blueberry)</td>
<td>Wellington</td>
<td>NPPRL</td>
<td>Other PPIN hosts include kiwifruit, grape, cucurbits, tomato, passionfruit, pea, Prunus spp., green bean, onion, capsicum, carrot, blueberry, oca, kawakawa, chicory, radish, hydrangea, olive and parsley.</td>
</tr>
<tr>
<td>Fusarium culmorum (fusarium leaf spot)</td>
<td>Medicago sativa (alfalfa, lucerne)</td>
<td>Central Otago</td>
<td>NPPRL</td>
<td>This fungus has a very wide host range.</td>
</tr>
<tr>
<td>Botryosphaeria parva (botryosphaeria rot)</td>
<td>Agave attenuata (agave)</td>
<td>Northland</td>
<td>NPPRL</td>
<td>Other PPIN hosts include Citrus spp., avocado, grape, apple, kiwifruit, pear, nashi, Japanese medlar, sweet chestnut, Prunus spp., rhododendron, puka, papaumu, feijoa, blueberry, tamarillo, poplar, and yarrow.</td>
</tr>
<tr>
<td>Fusarium phylophilum (no common name)</td>
<td>Dracaena draco (dragon tree)</td>
<td>Northland</td>
<td>NPPRL</td>
<td>Other PPIN hosts include Sansevieria trifasciata, petunia and Dracaena sp.</td>
</tr>
<tr>
<td>Necricia taenatoceca (dry rot, root rot, stem rot)</td>
<td>Cordyline sp. (cabbage tree, Ti)</td>
<td>Mid Canterbury</td>
<td>NPPRL</td>
<td>This fungus has a very wide host range.</td>
</tr>
<tr>
<td>Coniothyrium concentricum (brown leaf spot)</td>
<td>Fucrella bedinghousii (no common name)</td>
<td>Northland</td>
<td>NPPRL</td>
<td>Other PPIN hosts include Vaccinium sp.</td>
</tr>
</tbody>
</table>

Extension to distribution reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anisoplaca cosmia (Norfolk Island hibiscus moth)</td>
<td>Lagunaria patersonii (Norfolk Island hibiscus)</td>
<td>Gisborne</td>
<td>Forest Research</td>
<td>Other PPIN distributions include Auckland and Hawkes Bay.</td>
</tr>
<tr>
<td>Cerotelium fici (fig rust)</td>
<td>Ficus carica (fig)</td>
<td>Gisborne</td>
<td>Forest Research</td>
<td>Forest Research has recorded this fungus from Auckland, Northland and Waikato.</td>
</tr>
</tbody>
</table>

Codes of Welfare – Animal Welfare Act Update

The table below is a quick guide as to the status of the various codes of welfare as they are developed under the Animal Welfare Act 1999.

<table>
<thead>
<tr>
<th>Code</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broiler Code</td>
<td>Final code issued by Minister of Agriculture on 26 June 2003</td>
</tr>
<tr>
<td>Pig Code</td>
<td>Final code presented to Minister of Agriculture on 25 November 2003</td>
</tr>
<tr>
<td>Rodeo Code</td>
<td>Final code issued by Minister of Agriculture on 4 December 2003</td>
</tr>
<tr>
<td>Layer Hen Code</td>
<td>Final code presented to Minister of Agriculture on 19 April 2004</td>
</tr>
<tr>
<td>Zoo Code</td>
<td>Final code to be presented to Minister of Agriculture mid 2004</td>
</tr>
<tr>
<td>Circus Code</td>
<td>Final code to be presented to Minister of Agriculture mid 2004</td>
</tr>
<tr>
<td>Commercial Slaughter Code</td>
<td>Public consultation completed. Final code to be presented to Minister of Agriculture last quarter 2004</td>
</tr>
</tbody>
</table>

Plants records: George Gill, Technical Adviser, Pest Management, MAF Plants Biosecurity, phone 04 470 2742, fax 04 474 4257, george.gill@maf.govt.nz

Wayne Ricketts, Programme Manager Animal Welfare, phone 04 474 4276, fax 04 498 9888, wayne.ricketts@maf.govt.nz
## FOREST BIOSECURITY RECORDS 29/03/2004 – 14/05/2004

### Validated new to New Zealand reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Strobospora</em> sp. (no common name)</td>
<td><em>Ulmus glabra</em> (Scotch elm, wych elm)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>This is first report of this genus from New Zealand. Species of <em>Strobospora</em> overseas are not known to be pathogenic.</td>
</tr>
</tbody>
</table>

### New host reports

<table>
<thead>
<tr>
<th>Organism</th>
<th>Host</th>
<th>Location</th>
<th>Submitted by</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Uraba lugens</em> (gum leaf skeletoniser)</td>
<td><em>Eucalyptus tereticornis</em> (forest red gum)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>This moth has been found on a wide range of <em>Eucalyptus</em> species as well as pohutakawa, pin oak, brush cherry, apple gum, scarlet oak and ash.</td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus melliodora</em> (eucalyptus, yellow box)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus pulchella</em> (eucalyptus, white peppermint)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus gunnii</em> (eucalyptus, cider gum, cider tree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus gunnii</em> (eucalyptus, cider gum, cider tree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus cypellocarpa</em> (eucalyptus, mountain grey gum)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Nambouria xanthops</em> (no common name)</td>
<td><em>Eucalyptus gunnii</em> (eucalyptus, cider gum, cider tree)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>This gall forming wasp has been found on a wide range of <em>Eucalyptus</em> species.</td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus pulchella</em> (eucalyptus, white peppermint)</td>
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<td><em>Eucalyptus gunnii</em> (eucalyptus, cider gum, cider tree)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Acrocercops laciniella</em> (black butt leaf miner)</td>
<td><em>Angophora cordifolia</em> (dwarf apple, heart-leaf gum myrtle)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>This moth has been found on a wide range of <em>Eucalyptus</em> species.</td>
</tr>
<tr>
<td><em>Phaeophleospora eucalypti</em> (no common name)</td>
<td><em>Eucalyptus glaucescens</em> (eucalyptus, Tingiringi gum)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>This fungi has been found on a wide range of <em>Eucalyptus</em> species.</td>
</tr>
<tr>
<td></td>
<td><em>Eucalyptus cypellocarpa</em> (eucalyptus, mountain grey gum)</td>
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<td><em>Eucalyptus cypellocarpa</em> (eucalyptus, mountain grey gum)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Cardiaspina fiscella</em> (brown lace lerp)</td>
<td><em>Casuarina equisetifolia</em> (Bull oak)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN Hosts include orange, rose, lemon, pumpkin, mandarin, tangelo, New Zealand grapefruit, cedar elm, <em>Citrus</em> sp., kiwifruit, apple, <em>Malus</em> sp. and tamarillo.</td>
</tr>
<tr>
<td><em>Icerya purchasi</em> (cottony cushion scale)</td>
<td><em>Casuarina equisetifolia</em> (Bull oak)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN Hosts include orange, rose, lemon, pumpkin, mandarin, tangelo, New Zealand grapefruit, cedar elm, <em>Citrus</em> sp., kiwifruit, apple, <em>Malus</em> sp. and tamarillo.</td>
</tr>
<tr>
<td><em>Liothula omnivora</em> (bagnoth, case moth, kopi)</td>
<td><em>Quercus velutina</em> (Black oak)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include New Zealand grapefruit and white peppermint.</td>
</tr>
<tr>
<td></td>
<td><em>Planotortrix notophaea</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Laurelia novae-zelandiae</em> (latania scale)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include New Zealand grapefruit and white peppermint.</td>
</tr>
<tr>
<td><em>Hemiberlesia lataniae</em> (latania scale)</td>
<td><em>Laurelia nova-zelandiae</em> (pukatea)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include kiwifruit, titoki, mandarin, sweet orange, apple, rose, Japanese plum, box, grape and Japanese zeikova.</td>
</tr>
<tr>
<td></td>
<td><em>Banksia spinulosa</em> (banksia)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include kiwifruit, titoki, mandarin, sweet orange, apple, rose, Japanese plum, box, grape and Japanese zeikova.</td>
</tr>
<tr>
<td><em>Calidiopsis scutellaris</em> (no common name)</td>
<td><em>Angophora costata</em> (rusty gum, smooth-barked apple, Sydney red gum)</td>
<td>Bay of Plenty</td>
<td>Forest Research</td>
<td>This Cerambicid has been found on a wide range of <em>Eucalyptus</em> species.</td>
</tr>
<tr>
<td></td>
<td><em>Juniperus communis</em> (Common juniper)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN hosts include hiba, <em>Juniperus flaccida</em>, and white ash.</td>
</tr>
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</tr>
</thead>
<tbody>
<tr>
<td><em>Poropeza dacrydii</em> (no common name)</td>
<td><em>Poecocarpus totara</em> (totara)</td>
<td>Northland</td>
<td>Forest Research</td>
<td>This species has been previously recorded from Auckland, Wellington, Nelson, Buller and Fiordland.</td>
</tr>
<tr>
<td><em>Colorea senniana</em> (copper leaf)</td>
<td><em>Protea sp.</em> (protea)</td>
<td>Wellington</td>
<td>Forest Research</td>
<td>Other PPIN distributions include Auckland, Bay of Plenty, Taranaki and Wanganui.</td>
</tr>
<tr>
<td><em>Pleistodontes fraggattii</em> (Moreton Bay fig wasp)</td>
<td><em>Pittosporum crassifolium</em> (karo)</td>
<td>Auckland</td>
<td>Forest Research</td>
<td>Other PPIN distributions include Auckland, Bay of Plenty and Taranaki.</td>
</tr>
<tr>
<td><em>Sawadada bicornis</em> (powdery mildew)</td>
<td><em>Alectryon excelsus</em> (titoki)</td>
<td>Gisborne</td>
<td>Forest Research</td>
<td>This species has been previously recorded from Auckland and Waikato.</td>
</tr>
<tr>
<td></td>
<td><em>Juniperus communis</em> (Common juniper)</td>
<td>Auckland</td>
<td>Forest Research</td>
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</tbody>
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Forest records: Peter Thomson, Director MAF Forest Biosecurity, phone 04 498 9639, fax 04 498 9888, peter.thomson@maf.govt.nz
Exotic disease and pest emergency hotline: 0800 809 966
Animal welfare complaint hotline: 0800 327 027
www.maf.govt.nz/biosecurity